

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

- 1                   1.       (Currently amended) A micro electromechanical systems (MEMS) device  
2 comprising:  
3                   a scanning probe microscopy (SPM) component; ~~and~~  
4                   one or more fluidic channels formed in the SPM component;,  
5                   one or more control valves to control a flow of fluid in the one or more fluidic  
6 channels; and  
7                   one or more movable members formed in the SPM component, at least one fluidic  
8 channel being formed in each movable member, wherein fluid flow through the at least one  
9 fluidic channel produces movement in the movable member.
- 1                   2.       (Currently amended) ~~The MEMS device of claim 1 wherein the SPM~~  
2 ~~component is used~~ A method for nanomachining using the MEMS device of claim 1.
- 1                   3.       (Previously presented) A micro electromechanical systems (MEMS)  
2 device comprising:  
3                   a scanning probe microscopy (SPM) component;  
4                   at least one fluidic channel formed in the SPM component; and  
5                   a venturi tube formed along a portion of the fluidic channel,  
6                   wherein a vacuum can be developed by a flow of a gas or fluid through the  
7 venturi tube.
- 1                   4.       (Currently amended) A micro electromechanical systems (MEMS) device  
2 comprising:  
3                   a scanning probe microscopy (SPM) component;  
4                   one or more movable members formed in the SPM component;

5 a fluidic channel formed in a first movable member ~~the SPM component~~, the  
6 fluidic channel configured to deliver fluid to a tip of the SPM component; and  
7 one or more control valves formed in the SPM component to control a flow of  
8 fluid in the fluidic channel; and  
9 an amount of an isotope disposed along the fluidic channel,  
10 wherein the particles emitted by the isotope can be delivered by a fluid flowing in  
11 the fluidic channel to the tip to affect the charge distribution in a region about the tip.

1 5. (Currently amended) ~~The MEMS device of claim 4 wherein the particles~~  
2 ~~delivered to the tip can be used to perform~~ A method for performing nanomachining on a  
3 workpiece using the device of claim 4 wherein the particles are delivered to the tip.

6 - 7. (Canceled)

1 8. (Previously presented) The MEMS device as recited in claim 4 wherein  
2 the isotope is Americium 241.

1 9. (Original) The MEMS device as recited in claim 4 wherein the amount of  
2 isotope is disposed in a single isotopic region on the SPM device, wherein the single isotopic  
3 region contains 1 microcurie or less of radioactivity.

10 - 25. (Canceled)

1 26. (Currently amended) ~~Any application, measurement or operation in which~~  
2 ~~the device of 10 acts~~ A method of performing a nanomachining operation comprising  
3 manipulating a device as recited in claim 4 relative to a surface, including constraining motion of  
4 the device in a specific or constrained region.

1 27. (Currently amended) ~~Any application, measurement or operation~~ A  
2 method as in 26 in which the ~~application~~ nanomachining operation uses chemical or biological  
3 chips or devices in which material therefore ~~for the operation, application or measurement~~ is  
4 placed in wells in a regular arrangement on a plane or surface(s).

1                   28.     (Currently amended) ~~Any application, measurement or operation~~A  
2 method as in ~~26-27~~ in which the ~~target~~ material is DNA which has been marked optically,  
3 electrically or chemically so as to interact with optical, electrical or chemical detectors or  
4 emitters associated with or integrated in the device.

29. - 37.       (Canceled)

1                   38.     (Currently amended) The MEMS device of claim ~~37-1~~ further comprising  
2 a cantilever formed in the SPM component and operatively coupled to the moveable members,  
3 wherein movement in the movable members serves to move the cantilever.

39 - 40.       (Canceled)

1                   41.     (Currently amended) The MEMS device of claim **[40] 4** wherein the fluid  
2 flow comprises one of moving fluid from the fluidic channel formed in the first moveable  
3 member to create at least a partial vacuum thereby effecting movement of the first moveable  
4 member and moving fluid into the fluidic channel formed in the first moveable member wherein  
5 a force of the fluid effects movement of the first moveable member.

1                   42.     (Currently amended) The MEMS device of claim **[40] 4** wherein fluid  
2 flow through the at least one fluidic channel produces movement in the first movable member.

1                   43.     (Previously presented) The MEMS device of claim 42 further comprising  
2 a cantilever formed in the SPM component and operatively coupled to the moveable members,  
3 wherein a fluidic channel is formed in each moveable member, wherein movement in the  
4 movable members serves to move the cantilever.

1                   44.     (Currently amended) The MEMS device as recited in claim **[40] 4**  
2 wherein the moveable members act as passive elements.

1                   45.     (Currently amended) The MEMS device as recited in claim [40] 4  
2     wherein the moveable members produce electrical signals during movement, wherein the  
3     electrical signals serve to control subsequent movements.

1                   46.     (Previously presented) The MEMS device as recited in claim 45 wherein  
2     the electrical signals serve to obtain one of a predetermined motion of a first moveable member,  
3     a predetermined displacement of the first moveable member, a zero displacement position of the  
4     first moveable member.

1                   47.     (Previously presented) The MEMS device as recited in claim 4 further  
2     comprising a circuit for monitoring changes in charge accumulation in the fluidic channel as the  
3     isotope is moved by fluid flow.

1                   48.     (Previously presented) A method for nanoelectric discharge machining  
2     using the MEMS device as recited in claim 4, the method comprising imaging a surface to be  
3     machined and measuring surface features of the surface to be machined, the imaging and  
4     measuring being performed using a scanning probe microscopy technique.

49 - 58.           (Canceled)

1                   59.     (New) A micro electromechanical systems (MEMS) device comprising:  
2                   a scanning probe microscopy (SPM) component;  
3                   a fluidic channel formed in the SPM component, the fluidic channel configured to  
4     deliver fluid to a tip of the SPM component;  
5                   an amount of an isotope disposed along the fluidic channel, wherein the particles  
6     emitted by the isotope can be delivered by a fluid flowing in the fluidic channel to the tip to  
7     affect the charge distribution in a region about the tip; and  
8                   a circuit for monitoring changes in charge accumulation in the fluidic channel as  
9     the isotope is moved by a flow of fluid.